What is Claimed:

1. An invasive catheter assembly, comprising:

an elongate body having a longitudinal axis and first and second lumens;

a first catheter disposed in the first lumen and carrying a distally mounted anchor mechanism, the elongate body having a first distal opening accessing the first lumen through which the first catheter may be extended axially relative to the longitudinal axis of the elongate body; and

a second catheter disposed in the second lumen and carrying a distally mounted electrode, the elongate body having a second distal opening accessing the second lumen through which the second catheter may be extended at an angle relative to the longitudinal axis of the elongate body.

2. The catheter assembly of claim 1, wherein the anchor mechanism comprises an expandable body.

3. The catheter assembly of claim 1, wherein the anchor mechanism comprises a j-hook.

4. An invasive catheter assembly, comprising:

an elongate catheter;

an expandable electrode body mounted proximate one end of the catheter, the electrode body configured to form an enlarged circumferential region when expanded, the enlarged circumferential region defining a distal facing surface of the electrode body, wherein the distal facing surface includes an area configured to emit radio frequency (RF) energy.

5. The catheter assembly of claim 4, wherein the RF energy emitting area occupies substantially all of the distal facing surface.

6. The catheter assembly of claim 4, wherein the distal facing surface comprises multiple RF energy emitting areas.

7. The catheter assembly of claim 4, wherein the RF energy emitting area comprises a conductive substance disposed on the distal facing surface.

8. The catheter assembly of claim 6, wherein each of the RF energy emitting areas comprise a conductive substance disposed on the distal facing surface.

9. The catheter assembly of claim 4, wherein the electrode body comprises a wall enclosing an interior region, the catheter comprises a lumen accessing the interior region, and the RF energy emitting area comprises a microporous section of the wall located in the distal facing surface.

10. The catheter assembly of claim 4, wherein the electrode body comprises a wall enclosing an interior region, the assembly further comprising an interior support structure disposed in the interior region of the electrode body and adapted to urge the electrode body into an expanded geometry to thereby form the enlarged circumferential region.

11. A method for creating a lesion in endocardial tissue about a vessel opening using an invasive catheter assembly, the assembly comprising an elongate body having a longitudinal axis and first and second lumens, a first elongate catheter having a distally mounted expandable anchor body disposed in the first lumen, and a second elongate catheter having a distally mounted electrode disposed in the second lumen, the elongate body having a first distal opening accessing the first lumen through which the first catheter may be extended axially relative to the longitudinal axis of the elongate body and a second distal opening accessing the second lumen through which the second

catheter may be extended at an angle relative to the longitudinal axis of the elongate body, the method comprising:

introducing the elongate body into a patient's heart;

extending the distal end of the first catheter through the first distal opening of the elongate body and into a selected vessel;

expanding the anchor body to rotatably secure the distal end of the first catheter within the vessel;

extending the distal end of the second catheter through the second distal opening of the elongate body the second lumen so that the electrode comes into contact with endocardial wall tissue near the vessel opening; and

transmitting electrical energy into the tissue via the electrode.

12. The method of claim 11, further including:

rotating the second catheter about the first catheter while transmitting electrical energy in order to form a circumferential lesion in the endocardial wall surrounding the vessel opening.

13. A method for creating a circumferential lesion in endocardial wall tissue disposed about a vessel opening using an invasive catheter assembly having an expandable electrode body mounted proximate the end of an elongate catheter, the electrode body forming an enlarged circumferential region when expanded, the enlarged circumferential region defining a distal facing surface of the electrode body, the distal facing surface configured to emit radio frequency (RF) energy, the method comprising:

locating the electrode body proximate the vessel opening;

expanding the electrode body to form the enlarged circumferential region and urge the RF energy emitting area of the distal facing surface into contact with the endocardial wall tissue surrounding the vessel opening; and

transmitting RF energy into the tissue via the RF energy emitting area.

14. The method of claim 13, wherein the RF energy emitting area occupies substantially all of the distal facing surface, such that a substantially contiguous circumferential legion is formed in the endocardial wall surrounding the vessel opening upon the transmission of RF energy.

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